

MultiSync® XG85 Distance Chart

With Standard HD-144 Lens

8.12.98

Contents

Notes and Formulas	Page 1
Projection Distance and Screen Size for Ceiling Mount	Page 2
Projection Distance and Screen Size for Desktop	Page 3
Projection Distance and Screen Size for Rear Projection	Page 4
Cabinet Dimensions	Page 5
Cabinet Dimensions (Front View)	Page 6
Projector Mounting Locations	Page 7
Standard Ceiling Mount and Bracket	Page 8
Deluxe Ceiling Mount and Bracket	Page 9

Notes

- For screen sizes of 60 to 300 inches not indicated on the projection tables, use the formulas below.
- The projection distance is based on the screen width.
- If the figures on the table do not match the figures in the formulas, use the figures in the table.
- The margin of error for projection distance (A) is ±3%.
- For screens 150 inches (3810 mm) or larger (in the diagonal direction), set so that the distance between the surface of installation of the mounting A and the ceiling is E.

Formulas

Units: Inches, W"=Horizontal Screen Width

$$A = [(25/96 \times W'' - 12.5) \times 4.99] + 70.28$$

$$B = (\beta \times A) + 11.26$$

$$C = \gamma \times A$$

$$D = (\beta \times A) + 10.08$$

$$E = (\frac{1}{2} \times \text{Screen Height}) - B$$

Units: Millimeters, W"=Horizontal Screen Width

$$A = [(25/96 \times W'' - 12.5) \times 126.64] + 1785$$

$$B = (\beta \times A) + 286$$

$$C = \gamma \times A$$

$$D = (\beta \times A) + 256$$

$$E = (\frac{1}{2} \times \text{Screen Height}) - B$$

- A Distance between the lens and the screen center
- B Distance between the top of the supplied ceiling mount bracket and the screen center
- C Distance between the screen surface and the lens
- D Distance between the desktop and the screen center
- E Distance between the ceiling and the top of the supplied ceiling mount bracket

Screen Size (Diagonal)	α	β
60-79°	12.1°	0.210
80-129°	12.4°	0.215
130-179°	12.6°	0.218
180-300°	12.7°	0.220

MultiSync® XG85 Distance Chart

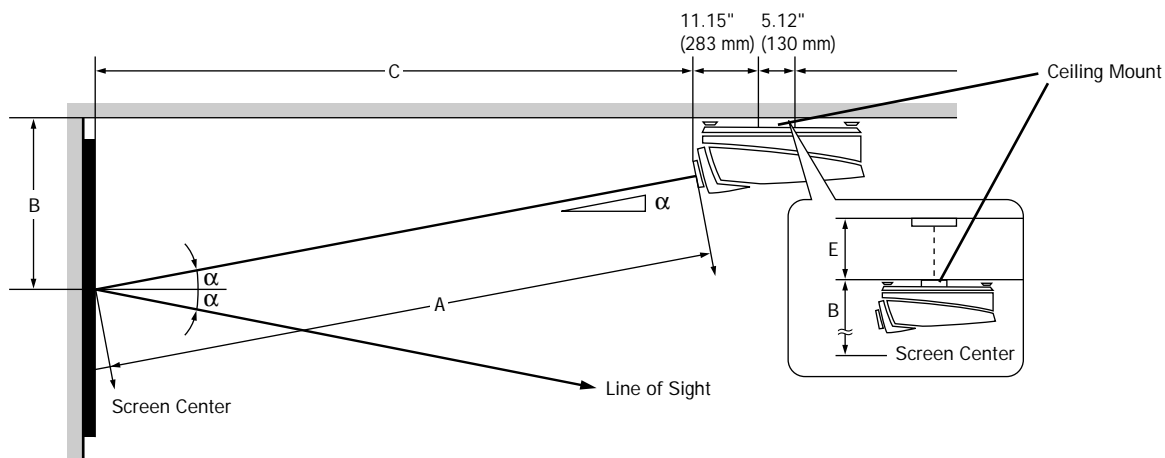
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Projection Distance and Screen Size for Ceiling Mount for XG85

Install in such a way that the projector and screen are positioned in the proper direction and at the proper angle. If not, the projector's performance will be affected and its reliability will decrease. Be sure to position the projector properly. The manufacturer will not be held responsible for any problems occurring when the projector is not installed in the proper position. The following shows the proper relative positions of the projector and screen. Refer to the table to determine the position of installation.

Ceiling Mount System



α	12.1°		12.4°				12.6°	12.7°					
β (=sin α)	0.210		0.215				0.218	0.220					
γ (=cos α)	0.978		0.977				0.976						
Screen Size H-Width	48"	56"	64"	72"	80"	96"	120"	144"	160"	192"	216"	240"	
(4:3 Diagonal)	(60")	(70")	(80")	(90")	(100")	(120")	(150")	(180")	(200")	(240")	(270")	(300")	
A	inch	70.28	81.54	91.6	101.74	112.68	133.43	164.69	196.11	214.02	258.51	290.48	315.67
	mm	1785	2071	2318	2584	2862	3389	4183	4981	5436	6566	7378	8018
B	inch	26.00	28.36	30.86	33.11	35.46	39.91	47.19	54.38	58.31	68.10	75.12	80.66
	mm	661	721	784	841	901	1014	1199	1381	1481	1730	1908	2049
C	inch	68.72	79.73	89.13	99.36	110.05	130.32	160.72	191.31	208.78	252.18	283.37	307.95
	mm	1746	2025	2264	2524	2796	3310	4083	4860	5303	6406	7198	7822
E	inch	—	—	—	—	—	—	—	—	1.69	3.91	5.88	9.35
	mm	—	—	—	—	—	—	—	—	43	100	150	238

Note:

For screen sizes of 60 to 300 inches not indicated on the projection tables, use the formulas on page 1. All calculations are with standard lens HD-144.

MultiSync® XG85 Distance Chart

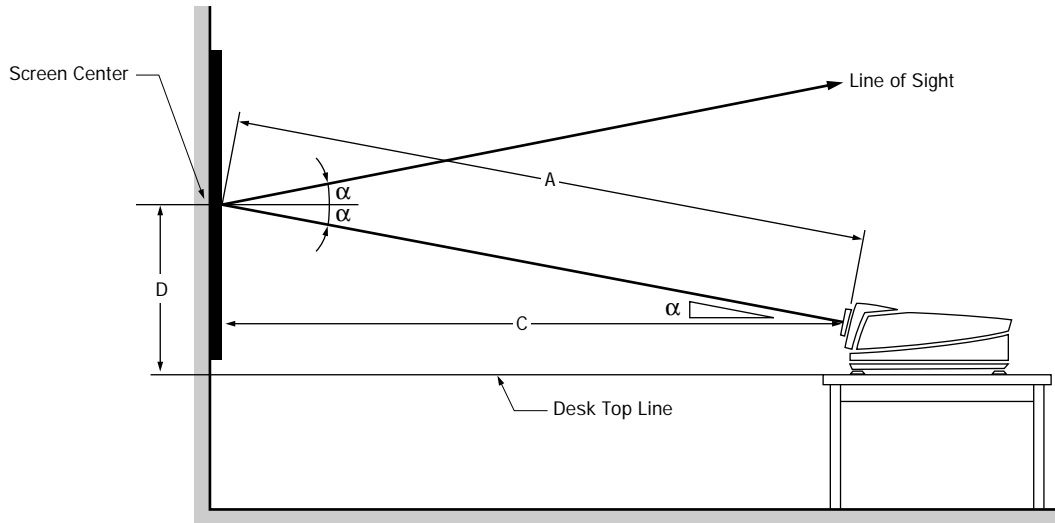
With Standard HD-144 Lens

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Projection Distance and Screen Size for Desktop

The following diagram shows the relationship between projector position and the screen.

Desktop System



α	12.1°		12.4°				12.6°	12.7°					
$\beta (= \sin \alpha)$	0.210		0.215				0.218	0.220					
$\gamma (= \cos \alpha)$	0.978		0.977				0.976						
Screen Size H-Width	48"	56"	64"	72"	80"	96"	120"	144"	160"	192"	216"	240"	
(4:3 Diagonal)	(60")	(70")	(80")	(90")	(100")	(120")	(150")	(180")	(200")	(240")	(270")	(300")	
A	inch	70.28	81.54	91.26	101.74	112.68	133.43	164.69	196.11	214.02	258.51	290.48	315.67
	mm	1785	2071	2318	2584	2862	3389	4183	4981	5436	6566	7378	8018
C	inch	68.72	79.73	89.13	99.36	110.05	130.32	160.72	191.31	208.78	252.18	283.37	307.95
	mm	1746	2025	2264	2524	2796	3310	4083	4860	5303	6406	7198	7822
D	inch	24.81	27.17	29.68	31.93	34.28	38.73	46.01	53.20	57.13	66.91	73.94	79.48
	mm	631	691	754	811	871	984	1169	1351	1451	1700	1878	2019

Note:

For screen sizes of 60 to 300 inches not indicated on the projection tables, use the formulas on page 1.

All calculations are with standard lens HD-144.

MultiSync® XG85 Distance Chart

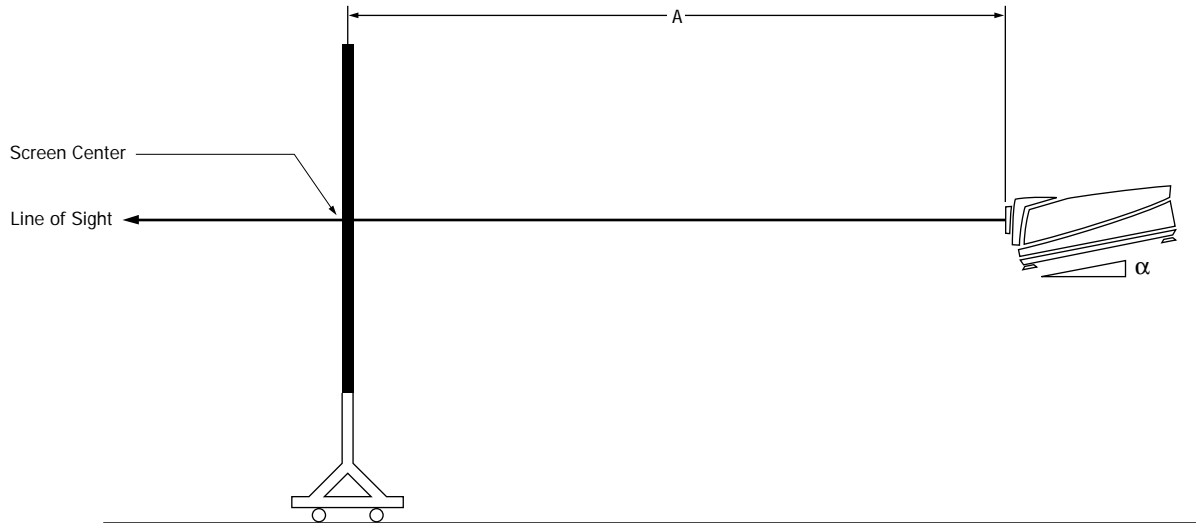
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Projection Distance and Screen Size for Rear Projection for XG85

The following diagram shows the relationship between projector position and the screen. See table below.

Rear Projection System



α	12.1°		12.4°				12.6°	12.7°					
β (=sin α)	0.210		0.215				0.218	0.220					
γ (=cos α)	0.978		0.977				0.976						
Screen Size H-Width	48"	56"	64"	72"	80"	96"	120"	144"	160"	192"	216"	240"	
(4:3 Diagonal)	(60")	(70")	(80")	(90")	(100")	(120")	(150")	(180")	(200")	(240")	(270")	(300")	
A	inch	70.28	81.54	91.26	101.74	112.68	133.43	164.69	196.11	214.02	258.51	290.48	315.67
	mm	1785	2071	2318	2584	2862	3389	4183	4981	5436	6566	7378	8018

Note:

For screen sizes of 60 to 300 inches not indicated on the projection tables, use the formulas on page 1.

All calculations are with standard lens HD-144.

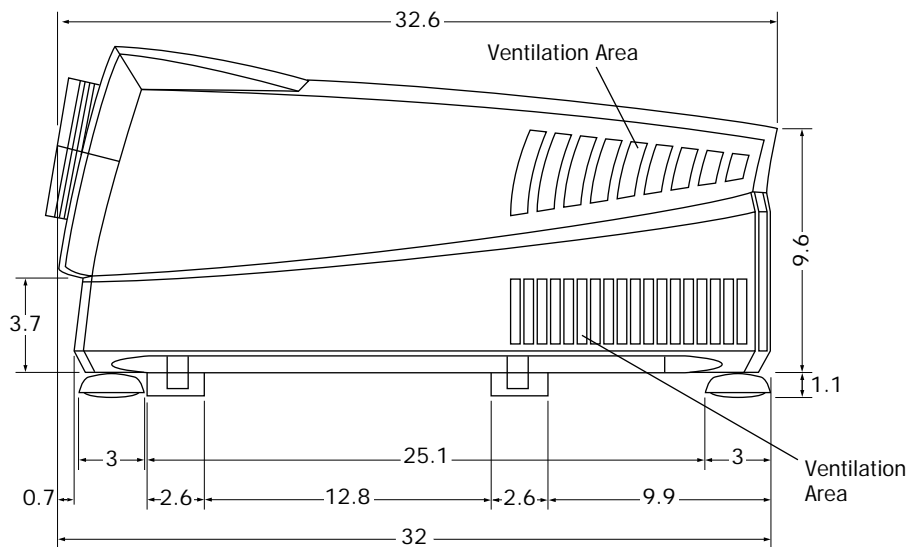
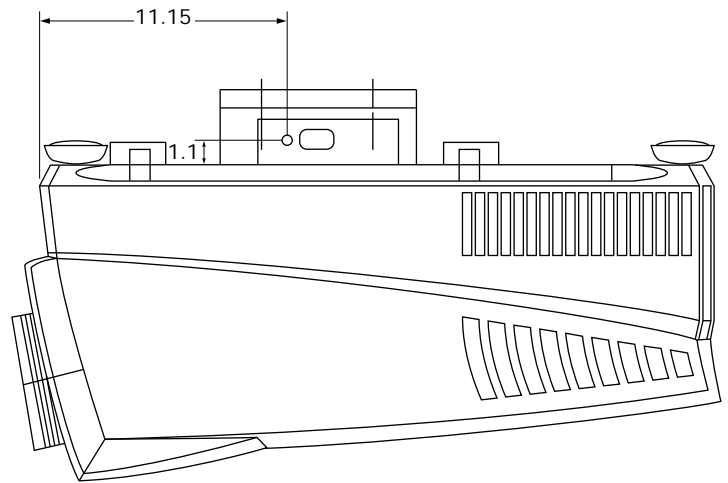
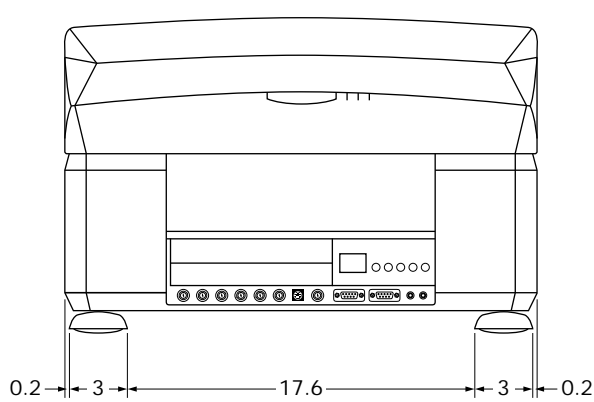
MultiSync® XG85 Series Distance Chart

With Standard HD-144 Lens

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Cabinet Dimensions

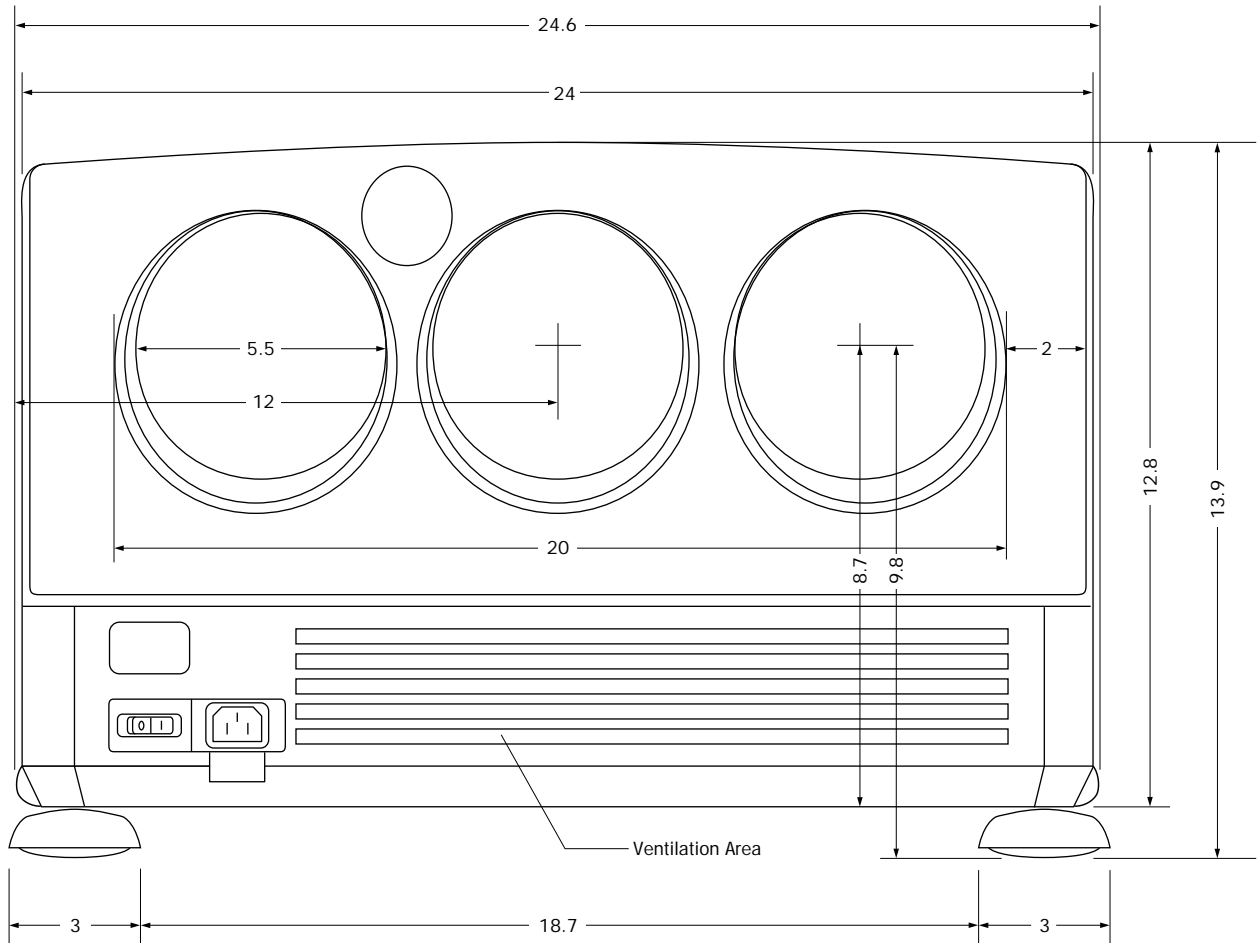
The following diagrams show the cabinet dimensions for the MultiSync XG135LC.
All measurements are in inches.



MultiSync® XG85 Series Installation Guide

Cabinet Dimensions

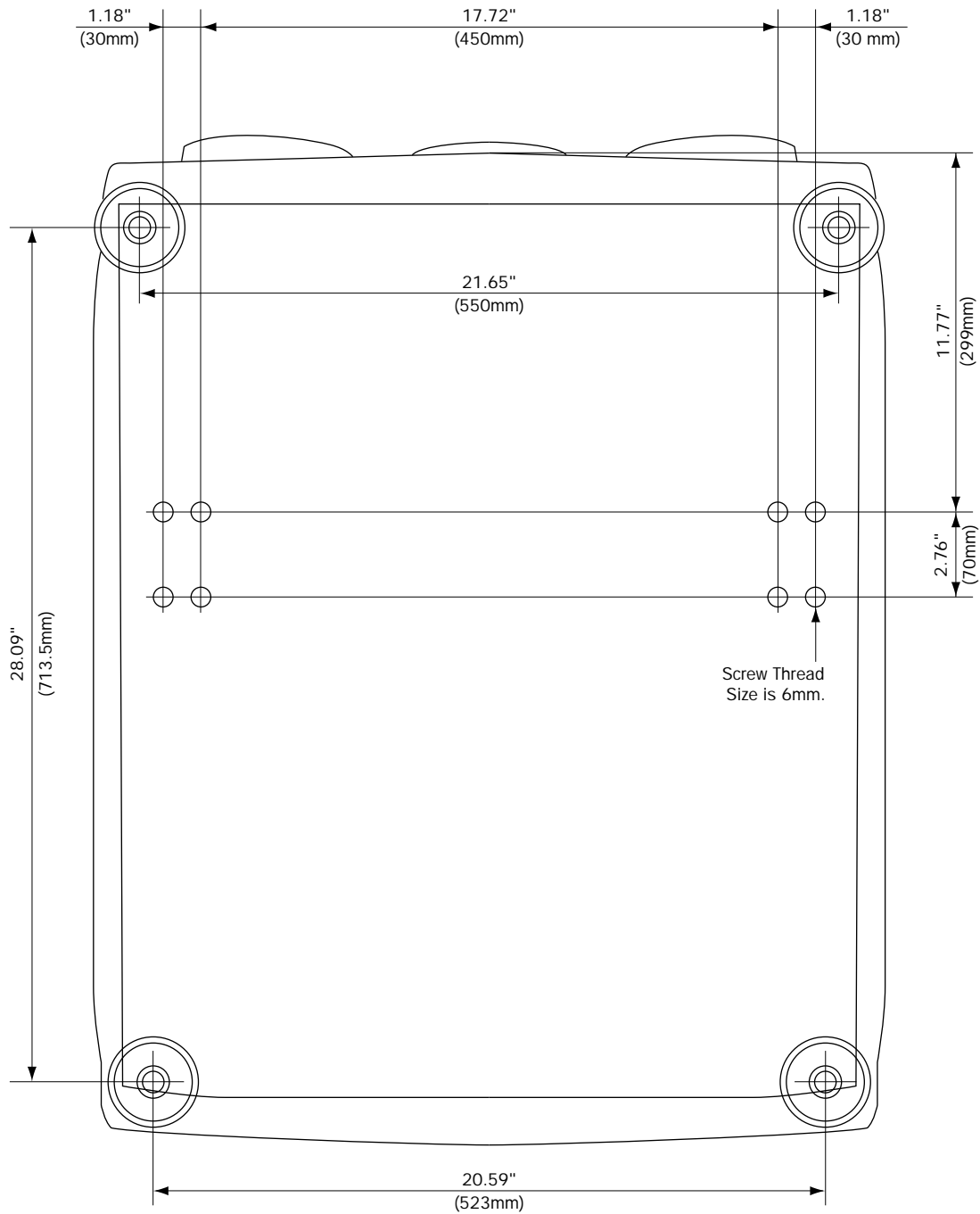
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MultiSync® XG85 Series Installation Guide

Projector Mounting Location

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MultiSync® XG85 Series Installation Guide

Deluxe Ceiling Mount and Bracket

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Ceiling Mount

Mounting Brackets

